"Stent with Improved Durability"

Claims:

1. A stent (10) with a tubular grid wall progressing around a longitudinal axis and comprising elastic wall segments (11) arranged circumferentially in sequence along the axis and connected to one another by means of connecting segments (12), wherein the wall segments (11) comprise elastic elements (14, 15), which are connected to one another by means of connecting elements (17), while forming a connecting angle (24), characterized in that the elastic elements (14, 15) have a wave-shaped structure with at least one wave peak (20) and one wave valley (22).

2. A stent, as recited in Claim 1, characterized in that the wave-shaped structure is concave, with respect to the angle (24), in the direction of the connecting element (17).

3. A stent, as recited in one of the preceding claims, characterized in that the elastic elements (14, 15) are connected to the connecting elements (12), forming a longitudinal frame (13) that progresses in an axial direction in the grid wall.

4. A stent, as recited in one of the preceding claims, characterized in that the longitudinal frame (13) encircles the wall is spiral form.

5. A stent, as recited in one of the preceding claims, characterized in that it contains several longitudinal frames (13) progressing in parallel to one another.

6. A stent, as recited in one of the preceding claims, characterized in that the stent has radiopaque markings.

7. A stent, as recited in one of the preceding claims, characterized in that the markings are arranged along a line encircling the grid wall in spiral form.

8. A stent, as recited in one of the preceding claims, characterized in that the connecting segments (12) and/or the connecting elements (17) have a greater material width than the elastic elements (14, 15).

9. A stent, as recited in one of the preceding claims, characterized in that the connections (12, 17) are at least twice as wide as elastic elements (14, 15).

10. A stent, as recited in one of the preceding claims, obtainable by cutting a hollow cylinder into a one-piece object.